



# All Chinese-Made Printers that use Epson DX5 and DX7 printheads



Which were exhibited at Guangzhou Sign China Expo 2011

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Mireco, 3D substrate.

Front Cover: A-StarJet printers Epson DX7 heads.

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## All Chinese-Made Printers that use Epson DX5 and DX7 printheads

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#### Introduction

Since 90% of the printer manufacturers and major distributors were at the Dongguan 2011 D-PES venue, there was only time to nip over to Guangzhou for a single day (one hour drive or bus trip each way, if you escape traffic).

Guangzhou is primarily a top expo for LED and LCD signage, and for inkjet media. Those are the strong points of this Sign China Expo for 2011. Most of the Chinese ink manufacturers are at D-PES an hour away; half the CNC router manufacturers are also in Dongguan. Although more than 95% of the printer manufacturers (especially UV-cured printers) are in Dongguan, there were several manufacturers and distributors exhibiting at Guangzhou, though fewer in 2011 than in 2010. However the overall crowds were full in Guangzhou: tens of thousands of people literally packed the expo center. Lots of foreigners from all over the world came here. Many had no idea there was a parallel (rival) expo in Dongguan.

Although there were not enough UV-cured printers or production solvent printers to create separate FLAAR Reports on each topic, there were just enough Epson-printehead machines at Guangzhou to make a separate report meaningful.

#### **Definitions**

Obviously Epson itself, and Mimaki, Mutoh, and Roland all use Epson printheads. These are commodities, so we do not review every model, especially because the reign of mild-solvent and eco-solvent is gradually losing market share as HP latex ink becomes increasingly popular. As soon as the Canon outdoor printer actually reveals what ink it will use (I guestimate it will be a latex-like or resin-like ink that requires curing but at lower temperatures than the furnace required for HP latex ink), then that will spell doomsday for Mimaki, Mutoh, and Roland eco-solvent printers.

Roland has never shown much understanding of the world market (of inks other than solvent) because they sell so many old-fashioned eco-solvent printers that their conservative president and even more conservative engineers remain in lullaby land and don't display anything really innovative. Someone has convinced them that metallic ink is all they need to exhibit in order to appear innovative. No one seems to warn end-users that this metalic ink requires slow printing and that the ink allegedly won't last very long in the sun.

Mutoh was not successful whatsoever with any UV-cured printer. Their Zephyr was too large for its small printing width, and pinchrollers over grit rollers was too antiquated for the real world needs. Mutoh tries to escape reality by concentrating on a mantra of biosolvent ink. Unfortunately their first MuBIO ink was a failure in the marketplace because it had too many downsides. The new Lactite

ink is an unsuccessful smoke-and-mirrors ploy, attempting to suggest it is a latex-like ink.

The "Bio-Lactite" ink was sufficiently unpopular that even a Mutoh booth at one trade show admitted that printshop owners were not impressed enough to make it worthwhile for Mutoh to continue trying to feature this ink.

Although I am not a chemist, what I saw on the MSDS sheet was scary. I would hate to see the REACH tabulation for those chemicals. In short the ink is not bio-friendly and is not convincingly



Mutoh, ValueJet 1628TD.

anywhere close to the potential of HP latex ink. However I will state clearly that the new Mutoh ink performs on signage material significantly better than the dismal MuBIO ink of previous years.

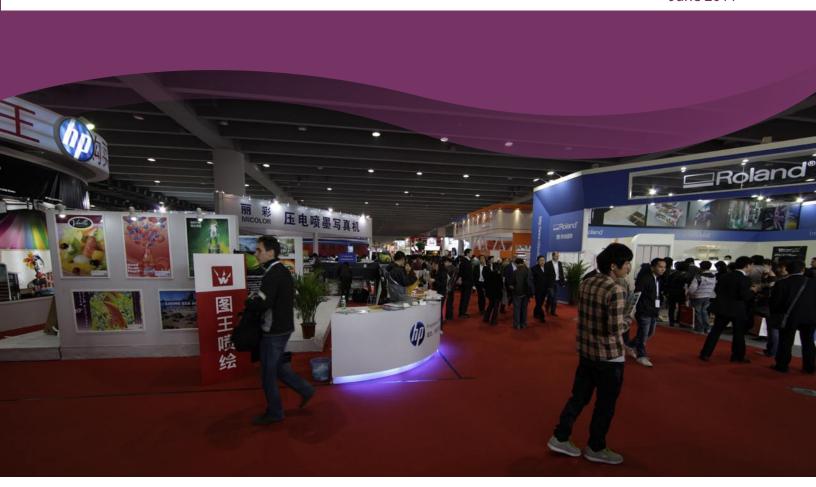
This leaves Mimaki: they at least have been moderately successful with UV-cured printers, though their early models were plagued by endless minor issues. And their new LED flatbed was inadequate at curing until they retrofitted it with a second curing lamp (neither LED nor mercury arc). Whether Mimaki has the initiative to build a printer from the ground up to handle any of the new inks remains to be seen (it is rumored that their new non-solvent ink printer will be launched by late 2011 or early 2012). But so far Mimaki has been the most adept of the Japanese

companies at producing new kinds of printers.

Epson entered the eco-solvent race too late. Their GS6000 is nice for signage but was not successful in the giclee market because giclee ateliers said its color gamut was not enough for pro level giclee. Rumors abound that Epson will launch a textile printer. If it is merely another dye sub machine this will really be a classic case of too-little toolate because there are several dozen cheaper dye sub printers already readily available. Epson can be successful in the textile market only if it is innovative: direct to cotton or direct to nylon, or direct to other crucial fabrics. But in the last ten years Epson has never shown much interest in the textile market: even HP has beat them with printing on fabrics with any standard HP 5000 or HP 5500.



Mimaki JV33-160, TrendVision.



HP, booth.

Seiko II has been successful with their mild-solvent printer so previously logically saw no need to develop much else. Their textile printer did not gain any noticeable market share. No Japanese company will take over the textile market because to them it's just a commodity like solvent printers. However printing on fabrics requires experience, and the average sales rep for these companies around the world has zero experience with printing on fabrics. For example, some Mutoh distributors often are not familiar with textile printing workflow. This is why we recommend companies such as DigiFab, since they know textile printing for over a decade.

Into this situation of stagnant Japanese printer manufacturers come Chinese manufacturers. They have taken huge market share around the world with Xaar 126 and 128 printheads. But those heads are of the last century (literally

as well as figuratively). Gradually Chinese manufacturers woke up to the awareness that they could and should offer better resolution. So some companies added printers with Konica Minolta heads or Seiko heads. Then the Spectra Polaris began to take over the market share from the antiquated Xaar 126 and Xaar 128 (but the Polaris also has a huge drop size).

Then quietly over the last three years Astarjet because successful offering printers with Epson printheads. They acquired dealers around the world and began selling these printers in volume. Gradually other Chinese manufactures noticed this and began jumping in. Since these are commodities we at FLAAR would normally not evaluate them but more and more distributors from around the world began asking me which brand of Chinese Epson-headed printer to buy. So at Shanghai 2010 I began to look more closely at Astarjet. Since it was never possible to visit

ssional Printers Design & A-Starjet Neo New Era of the Little Giant Brand New Design and Production Skills to Gain Great Stability Print Quality and Print Speed hake the Market and Profit Making

their factory, I began to look around and see what other comparable printers were available. Much to my surprise I found about TEN OTHER BRANDS. I never would have noticed these other brands if Astarjet had used their demo room to train me; I would have spent all my time learning about Astarjet. But now I am exploring all ten other brands.

Of these ten other brands, some are rebranded from three to five OEM manufacturers. So you really need to learn about the original manufacturers.

Even though the Guangzhou expolacked an estimated 95 percent of the Chinese printer manufacturers, the approximately 5% that did exhibit included Micolor, which has quietly but quickly risen as the major competitor to Astarjet. If you look around the D-PES expo in Dongguan and around any other Chinese wide-format printer expoyou quickly notice that most rebranded machines are variants of either Astarjet or variants of Micolor. Other machines that are sometimes rebranded would be Sky-Color and Allwin.

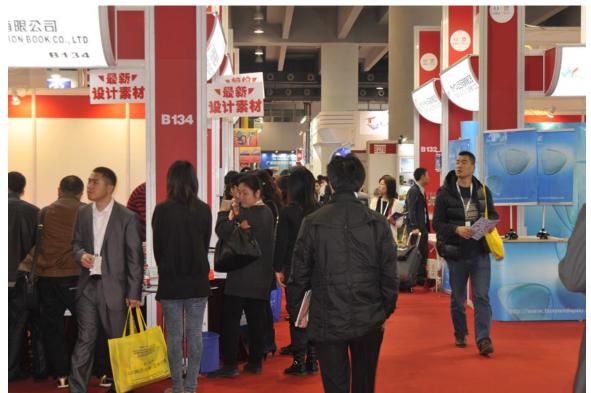
A-Starjet,\_booth.

#### Epson, Mimaki, Roland, Mutoh had booths at Guangzhou expo 2011

Since these brands exhibit at all other expos that I attend in other countries, there was no incentive to take notes on their models at a Chinese expo: all were pretty much the same as everywhere else, though I do note that Epson often has a "C" on models they sell in China. Would be curious to learn what features these have, or more likely, what features they lack that might be on the "EU" or "USA" versions.

Epson Stylus Pro 4880C Epson Stylus Pro 7880C Epson Stylus Pro 9880C Epson Stylus Pro 11880C

Are examples of the curious "C" variant product number a special version for the Chinese market? If so, what do the C-versions have that is different, or what do they lack that are present in versions sold in Western Europe?



Sign China, general view.

#### **Benefit for Epson**

(to have Chinese manufacturers use their Epson heads)

The benefit for Epson of the Chinese manufacturers is that they are selling thousands more printheads a month. If the Chinese manufacturers switched to Lexmark or Lenovo heads, even though these are thermal so can't take eco-solvent ink: this switch away from Epson heads would destroy a large percent of Epson printheads market share. Eco-solvent is fading from the scene. What will count in the future is whether latex or resin ink can flow through a Lexmark or Lenovo head.

If any ink company makes a latex-like or resin-like ink that can flow through an HP head, and assuming that Canon is using bubble-jet heads in its new "outdoor printer" this means that in two short years all users of Epson heads could abandon them if Epson attempts to restrict access for its heads for Chinese manufacturers.

The best way Epson can prevent abandonment of their heads is to encourage Chinese manufacturers (even if not officially) to use Epson heads and make Epson heads the de-facto work-horse of the world.

Besides, even though Epson gets no money from the ink flat flows through Chinese printers, the fact x-thousand heads per month are being bought discretely, means that the Epson printhead factory can produce more efficiently and at lower cost. So Epson makes more profit selling heads to Mimaki, Mutoh, Roland and to its own printers ONLY IF there are thousands of other people (in China and in India) buying Epson heads simultaneously, every month.

Epson keeps trying to squeeze money out of Mimaki, Mutoh, and Roland by not allowing them to enter certain markets. Epson also charges a fee for using their heads based on the ink that flows through any Epson head. The result is simple: the new Mimaki outdoor printer will no longer use Epson heads at all: the new Mimaki printer uses a completely different brand.

If Epson continues to demand an ink"tax" from printer manufacturers, one by one these manufacturers will stop using Epson printheads. So the most intelligent thing for Epson is to allow their printheads to enter the Chinese printer manufacturing market.

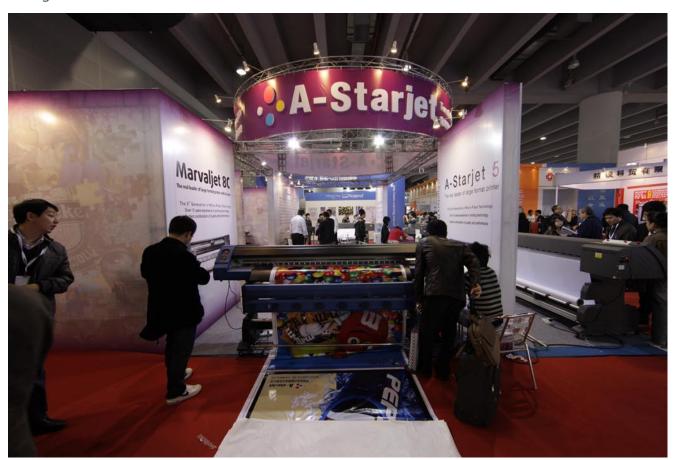
#### **Astarjet**

Astarjet is one of a few Chinese manufacturers using the DX7 printhead of Epson (what happened to the "DX6"?). However most printer models still use the better known Epson DX5 printhead.

They started making these printers only in 2009, so very recently. I did not notice them until Dongguan 2010. In 2011 their main booth was at Guangzhou, with only a small booth at D-PES.

Astarjet was the first company using Epson printheads that I noticed. But since it has not yet been possible to get to their factory, we started to look at all the other brands using Epson heads, and at all the other brands using thermal heads (from Lexmark and Lenovo).

Terminator Image Technology Co., Ltd., ChangZhou city, perhaps an hour or so northwest from Shanghai.



A-Starjet, booth.

#### CAE

CAE Technology states it manufacturers printers, but its UV printer is made by Kincolor. So it would be well to double-check and see if the other printers in the CAE catalog are also made by Kincolor, or not.

The CAE Eco-solvent printer, which accepts also water-based inks, shares a chassis with basic standard Micolor printers. But the feeding system on the CAE printer, front and back, is added. Nothing like this feeding system is pictured in most Micolor brochures, not in other clones of Micolor printers.

Their ink carries the NUS label.

GhuangZhou Sien Technology Co., Ltd.

#### DongXingKJ

This company is a reseller for Micolor printers. On their home page they offer primarily ink. 75% of their web pages display only an error message in Chinese. I could find no printers on their home page or inside either. But their booth brochures had a nice 1-page brochure on their JX WIND V1600 and WIND V1800 printers (basic Micolor machines).



DongXingKJ, MEDIA booth

#### Gfinger (Golden Finger)

This company is a reseller for Micolor printers

#### GT (GuanTu)

GT JETPRO was the name on the front of the catalog. The exhibitor seems to have been jetga, Guangzhou CaiTong Digital Technology Co., Ltd, which I estimate is a reseller, not the manufacturer.

This printer can be recognized by the sort of vaguely "Rolandlike" indentations on the front lid. It is common practice in China to have your chassis mimic a Roland or Mimaki or Mutoh printer. It is not a copy of Roland whatsoever, but clearly the design is based on the Roland concept. I saw GT Jetpro JT-1600s Jetga.



comparable chassis style at the D-PES expo in Dongguan, so our parallel report on Epson printheads at that expo will reveal the manufacturer.

Another brochure of jetga reveals it is a dealer also for HP and CrystalJet.

The spec sheet was primarily in Chinese, and although I can now read a few Mandarin charcters on a spec sheet (double four colors, and eight colors, I can read that in pure Chinese after so much practice this week with spec sheets), but it will take more training by a patient instructor for me to read an entire Chinese spec sheet.

#### Micolor

From their web site Micolor appears to be primarily an ink company. If you click on PRODUCT, you get only inks (no printers). The main NEWS on their web site dates to 2005.

Their entire web site pictures only one solitary lone printer, the Micolor WJ1545.

Their handout at Guangzhou presents the SJ1645, SJ1845 (but neither are on their web site, at least not the English one). SJ seems to mean "Solvent jet" since their other models are WJ which I assume means "Water jet."

The first time I saw a Micolor printer outside China was at VISCOM Frankfurt 2010. The print quality was gorgeous. Since then I have seen more and more Micolor printers. In effect Micolor is the main competitor to AStarjet.

Where the actual Micolor printers are manufactured I do not yet know, since I only began to study Epson-printheaded printers recently, due to so many distributors in countries around the world asking whether to select Astarjet or whether there was another brand for their short-list. Since I did not yet reach the Astarjet factory, I began to look for alternatives, and learned about Micolor. I am also learning about the printers that use Lexmark and Lenovo printheads. These printheads can't take solvent inks, but as soon as latex ink is available for these thermal printheads, they can totally replace printers that otherwise today need Epson printheads. So Epson should encourage Chinese manufacturers to use the Epson head, otherwise manufacturers will drop that head totally and move to thermal heads.

Several dealers and distributors offer the same or related printers: WER-China offers this as the WER-EW600. The WER catalog states they are a manufacturer of inks and printers but most of the printers in their catalog are manufactured by other companies, such as by Zhongye. Thus WER-China would be considered a dealer.

Huaxin-Micolor Ink Co., Ltd.



Micolor, booth.



#### NUS

All their printers appear to be made by Micolor.

Their text does not claim directly that they make printers, but insinuates it. Their text does claim they manufacture inks. Their web site shows UV-cured inks, but shows no factory. Since Micolor is primarily an ink manufacturer, this situation raises the question of whether NUS is a dealer also for inks from Micolor.

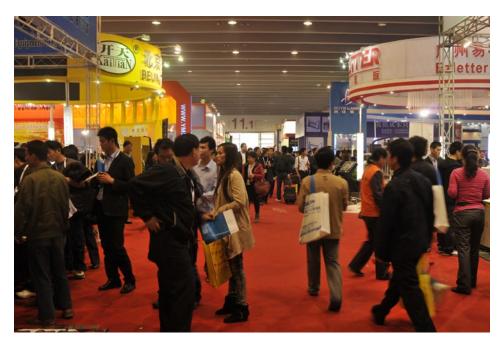
I am skeptical of any claim to be an ink manufacturer unless colleagues tell me a company really is an ink manufacturer, or unless I myself see the actual factory. If we are brought to an actual factory, then we update and revise our text.

The dealer at the Guangzhou expo was ShenZhen Chuangxin Technology Co., Ltd.

#### Mystery Printer: SJ / WJ 1608

This entire brochure has no brand name, no model name, no address, and no web site!

If you Google the product names you get effectively no meaningful returns on any Chinese manufacturing site (ironically you get a FLAAR PDF which identifies the printer as being rebranded from InkJet). Notable that a **FLAAR** Report provides the only mention of this printer on the entire Internet (but this is probably why over a million people around the world use the FLAAR web site).



Sign China general view.

#### Printers with no brand names

If you go on-line and Google Epson DX5 printhead printers you get all the Chinese trading web sites. They show you printers that, in effect, have no recognizeable brand name. Signstar International Industrial Ltd. would be an example.

If a printer company does NOT exhibit at Dongguan, Guangzhou, or APPPEXOP in Shanghai, then you don't always know who you are really dealing with.

The printer shown here does not seem to be made by Astarjet or Micolor. It looks closer to an Allwin (but the Allwin web site does not show any enlargement of their printer; only a miniscue view that is too small to see any details; when you click on it instead of getting a larger view, you only get text).

#### "Counterfeit" printers

Since Chinese printer manufacturers copy printers from Japan, USA, and Europe, it should hardly be much of a surprise that a few Chinese manufacturers copy printers of successful brands in China too!

AStarjet has complained (on their web site) that one Chinese company is copying their printer.

### Remember, there are other FLAAR Reports on Epson printheaded machines.

There is also a new FLAAR Reports on Chinese printers with Lexmark and Lenovo printheads that were exhibited at D-PES (Dongguan) 2011.

## If you wish assistance in making sure your container load from a Chinese printer contains what you ordered?

ChinaSigns (sign-in-china.com) has a new program to assist distributors and large printshops around the world to keep track of what is really being packed inside the container that is being shipped to you from China. You do not have to order the product from or through ChinaSigns: you can order any product in China independently, but have ChinaSigns inspect the product as it is being shipped.

This is a new service and I am just learning about it. For further information contact "Rissa" overseas 06@ chinasigns.cn. I have been to the headquarters of ChinaSigns company twice so I have seen their size, their capabilities, and have learned of this frankly remarkably innovative service during my last visit.

First posted, June 2011.



Sign China general view.